

**Amendments to the claims:**

This listing of claims will replace all prior versions, and listings of claims in the application.

**Listing of Claims:**

1. (Currently amended) A motherboard, comprising:  
  
a chipset for managing data transfers within the motherboard;  
  
a scalable interconnect connecting to the motherboard; and  
  
a plurality of high-speed video card slots connected to the interconnect, the high speed video card slots including at least one first video card slot and second video card slot,  
  
wherein the motherboard enables a first and a second video card to attach, respectively, to the at least one first video card slot and second video card slot, and wherein the motherboard enables the first and the second video ~~card~~ cards to operate ~~concurrently~~ in parallel to output graphics data to a single visual display device.
2. (Original) The motherboard of claim 1, further comprising a switch connected to said interconnect, wherein said switch distributes bandwidth from said interconnect to said plurality of high-speed video card slots.
3. (Original) The motherboard of claim 2, wherein said interconnect comprises a x16 connection, and wherein said switch distributes bandwidth from said x16 connection to two x16 video card slots.

U.S. Application No. 10/689,716  
Amendment

4. (Original) The motherboard of claim 1, wherein said interconnect comprises at least a x32 connection.

5. (Original) The motherboard of claim 4, wherein said interconnect is divided into two or more x16 connections between the chipset and the plurality of high-speed video card slots.

6. (Original) The motherboard of claim 1, wherein said interconnect comprises at least a x16 connection, and wherein said interconnect is divided into a x8 connection between the chipset and each of said plurality of high-speed video card slots.

7. (Original) The motherboard of claim 1, wherein said interconnect comprises a connection having at least 24 lanes, and wherein said interconnect is divided into a x8 connection between the chipset and one of said plurality of high-speed video card slots and a x16 connection between the chipset and another of said plurality of high-speed video card slots.

8-28 (Previously cancelled)

29. (Previously amended) The motherboard of claim 1, wherein the interconnect comprises a first x16 connection to the first video card slot and a second smaller-scaled connection to the second video card slot.

U.S. Application No. 10/689,716  
Amendment

30. (Original) The motherboard of claim 29, wherein the second connection is at least one of a x1, x2, x4, and x8 connection.

31. (Cancelled)

32. (Original) The motherboard of claim ~~31~~ 1, further comprising a peripheral slot connected to the interconnect, the peripheral slot having second prespecified dimensions, wherein the second dimensions differs from the first dimensions.

33. (Original) The motherboard of claim ~~31~~ 1, wherein the first dimensions of the video card slots are selected to allow a graphics card to be coupled to any of the video card slots.

34. (Original) The motherboard of claim 33, wherein the graphics card is designed to be used with a x16 connection.

35-40. (Previously cancelled)

41. (Currently amended) A motherboard for supporting multiple video cards, the motherboard, comprising:

a processor socket adapted to receive a central processing unit (CPU);

a single scalable interconnect that provides data paths to the processor socket, wherein the scalable interconnect is selectively divided as needed to allocate the data paths; and

a plurality of high-speed video card slots connected to the interconnect, wherein each of the video card slots has first prespecified dimensions and is specifically adapted for coupling to a video card,

wherein the motherboard is capable of receiving substantially similar first and second video cards and facilitating ~~concurrent~~ parallel operation of a the first and a second video ~~card~~ cards to output graphics data to a single visual display device.

42. (Cancelled)

43. (Previously cancelled)

44. (Currently amended) The motherboard of claim 43 ~~41~~, wherein each of the video card slots is configured to couple with a graphics card designed to be used with a x16 connection.

45. (Original) The motherboard of claim 41, wherein the interconnect comprises a first data path and a second data path, each of the first and second data paths connecting the processor socket to different video card slots, the first data path being equal to or larger in scale than the second data path.

46. (Original) The motherboard of claim 45, wherein the second data path comprises at least one of a x1, x2, x4, and x8 connection.

47. (Original) The motherboard of claim 41, further comprising a peripheral slot connected to the interconnect, the peripheral slot having different dimensions from the video card slots.

48. (Currently amended) A high performance computer, comprising:

a motherboard including ~~a processor socket adapted to receive a central processing unit (CPU),~~ a scalable interconnect including a first and a second ~~that provides data paths to the CPU,~~ ~~wherein the scalable interconnect is selectively divided as needed to allocate the data paths,~~ and a first and a second video slots, wherein the first and the second video slots connect, respectively, ~~to one or more of the first and second data paths, the first data path being equal to or larger in scale than the second data path, wherein~~ the first and the second video slots have a substantially similar physical configuration, and wherein the video slot physical configuration is selected to allow the first and the second video slots video slots to accept a graphics card;

a first graphics card coupled to the first video slot; and

a second graphics card coupled to the second video slot,

wherein first and second video cards operate ~~concurrently~~ in parallel to output graphics data to a display device.

49. (Cancelled)

50. (Previously added) The motherboard of claim 1, wherein a display area of the display device is divided into first and second sections, said first video card performing graphics

processing related to said first section; and said second video card performing graphics processing related to said second section.

51. (Previously added) The motherboard of claim 41, wherein a display area of the display device is divided into first and second sections, said first video card performing graphics processing related to said first section; and said second video card performing graphics processing related to said second section.

52. (Previously added) The computer of claim 48, wherein a display area of the display device is divided into first and second sections, said first video card performing graphics processing related to said first section; and said second video card performing graphics processing related to said second section.